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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,866	05/10/2001	Glenn E. Hoffman	2950	5151

7590 01/31/2002

Ralph H. Dougherty  
DOUGHERTY & CLEMENTS LLP  
6230 Fairview Road, Suite 400  
Charlotte, NC 28210

EXAMINER

ANDREWS, MELVYN J

ART UNIT	PAPER NUMBER
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1742

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DATE MAILED: 01/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

09/852,866

Applicant(s)

HOFFMAN ET AL.

Examiner

Melvyn J. Andrews

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-- The MAILING DATE of this communication appears on th cover sheet with the correspond nce address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08June2001 .
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 .
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_ .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 to 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Avotins et al (US 5,464,465). Avotins et al discloses a process for producing

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agglomerates comprising iron ore (col.14, line 55) and paper fibers and coke breeze (col.6, lines 7 to 11) although the expression cellulose fiber is not explicitly disclosed by Avotins et al it is obvious to one of ordinary skill at the time the invention was made that paper fibers are the equivalent of cellulose fibers as admitted by applicants in Claim 16; it is noted that the limitation "with up to 15% water" includes a lower limit of zero . With respect to Claim 18 Avotins et al discloses iron ore the having an average particle size(col. 7, Example 3) within the claimed range.. With respect to Claim 19 the concentration of paper fibers is not explicitly disclosed by Avotins et al but it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the concentration of paper fiber in the Avontins et al since it is a result effective variable as evidenced by Avotins et al which claims fibers comprise primarily acrylic fibers, and the balance of the fibers are selected from paper fibers (col.16, lines 7 to 11) , *In re Antoni*, 195 USPQ 6. With respect to Claims 8, 9 and 17 Avotins et al discloses that the product is suitable for L-D converters (col.4, lines 50 to 63) which produces steel.

Claims 1 to 7, 10 to16, 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowe (US 2,865,731). Crowe discloses a process for briquetting iron ore with cellulose fibers (col.4 , lines 6 to 9) which may be tested for heat resistance by heating up to 2000° F in such a way that plenty of time was allowed for the paper to burn out (col.3, lines 53 to 58) but does not specify the time and temperature claimed in Claim 1 but it would have been obvious to one of ordinary skill in

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the art at the time the invention was made to optimize these result effective variables ,

*In re Antoni, 195 USPQ 6*

Claims 8, 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowe et al as applied to claims 1 to 7, 10 to 16, 18, 19 and 20 above, and further in view of Avotins et al. Crowe discloses a product suitable for feeding to blast furnaces (col.1, lines 15 to 19) but does not disclose that the product is supplied to a steelmaking process but Avontins et al disclose that a product produced from iron bearing material and paper fibers is suitable to be used in blast furnaces as well as L-D converters (col.4, lines 50 to 63) which produces steel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Crowe product which is also produced from an iron material and paper fiber to produce steel in an L-D converter since the Avotins et al product and Crowe product are obviously equivalent sources of iron.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvyn J. Andrews whose telephone number is 703-308-3739. The examiner can normally be reached on 8:00A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7719 for regular communications and 703-305-7719 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

  
**MELVYN ANDREWS**  
**PRIMARY EXAMINER**

mja  
January 25, 2002